

# Hands-Free Product Roll Dispenser

## Abstract

A hands-free paper product dispenser has two separate IR emitter and sensor circuits, one to feed paper product through the dispenser and the other to cut it, each interlocked to prevent one from running while the other is in operation. The length of paper dispensed is under complete control of the user. Paper is clamped above and below the cut to assure a clean cut, clamped gently to avoid tearing by wet hands, and released completely after product is taken from the machine to avoid sticking of product to machine surfaces. Dynamic electric braking is used in the circuitry to reduce noise and impact wear on dispenser parts.